

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/807,596	03/24/2004		Michael S. Smyth	210_661	3624	
20874	7590	04/21/2006		EXAMINER		
WALL MA	RJAMA	& BILINSKI	NGUYEN, NAM V			
101 SOUTH	SALINA	STREET		ART UNIT		
SUITE 400	SUITE 400				PAPER NUMBER	
SYRACUSE	E, NY 13	3202		2612		
			•	DATE MAIL ED. 0401000	DATE MAIL ED. 04/21/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/807,596	SMYTH ET AL.
Office Action Summary	Examiner	Art Unit
	Nam V. Nguyen	2612
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the c	orrespondence address -
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
1) ⊠ Responsive to communication(s) filed on 11 3 2a) ☐ This action is FINAL . 2b) ☑ This 3) ☐ Since this application is in condition for allowed closed in accordance with the practice under the condition of the conditio	s action is non-final. ance except for formal matters, pro	•
Disposition of Claims	•	
4) Claim(s) 1-11 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) Claim(s) is/are allowed. 6) Claim(s) 1-6,8,9 and 11 is/are rejected. 7) Claim(s) 7 and 10 is/are objected to. 8) Claim(s) are subject to restriction and/o	awn from consideration.	
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 24 March 2004 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the E	a) accepted or b) objected to edrawing(s) be held in abeyance. See ction is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documen 2. ☐ Certified copies of the priority documen 3. ☐ Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	nts have been received. Its have been received in Applicationity documents have been received in the contraction of the contra	on No ed in this National Stage
Address of the second of the s		
 Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 3/24/04. 	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	



Art Unit: 2635

DETAILED ACTION

The application of Smyth et al. for a "method of setting the output power of a pager to aid in the installation of a wireless system" filed March 24, 2004 has been examined.

Claims 1-11 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 6, 8-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carner et al. (US# 6,622,925) in view of Harel al. (US# 6,366,195).

Referring to claims 1 and 8, Carner et al. disclose a method of setting up a remotely controlled wireless thermostat system (10) (i.e. a wireless thermostat system) (column 4 lines 22 to 60; see Figure 1) that includes the steps of: providing a radio equipped pager (26) (i.e. a wireless transceiver) for transmitting and receiving messages; connecting the pager (26) to a programmable controller (17) (i.e. a communication microprocessor) of a remotely controllable thermostat system (22), said controller (17) containing an algorithm (18) for adjusting the power

Art Unit: 2635

output of the pager (26) (column 4 line 61 to column 5 line 18; see Figure 2); transmitting a message from the pager (26) to a local service provider network (150) at an initial low power setting (column 5 lines 19 to column 6 line 67; column 12 line 55 to column 13 line 5; see Figure 12).

However, Carner et al. did not explicitly disclose determining if the message has been successfully transmitted and if not, increasing the power output of the pager to a next high increment; and retransmitting said message.

In the same field of endeavor of two-way paging systems, Harel et al. teach that determining if the message (SIM) (i.e. a standard inbound message) has been successfully transmitted and if not, increasing the power output (i.e. increase power level) of the pager (110) (i.e. pager/subscriber unit) to a next high increment; and retransmitting said message (column 4 line 32 to 60; see Figures 1 to 4) in order to control the transmission power level of individual subscriber units.

One of ordinary skilled in the art recognizes the need to retransmit a message with an increase power level if no acknowledge signal is received taught by Harel et al. in a wireless thermostat system of Carner et al. because Carner et al. suggest it is desired to a remote control node of a thermostat system to send command until there is a response in order to make sure the RF link is not in the interferences and increase efficiencies (column 12 line 5 to column 13 line 5; see Figures 11 to 12) and Harel et al. teach that a pager/subscriber unit retransmits data at a higher power level if no standard acknowledge signal is received from the paging network (column 4 lines 20 to 60; see Figure 3) in order to have a successful communication with a paging network with a minimal power level. Therefore, it would have been obvious to a person

Art Unit: 2635

of ordinary skill in the art at the time of the invention was made to retransmit a message with an increase power level if no acknowledge signal is received taught by Harel et al. in a wireless thermostat system of Carner et al. with the motivation for doing so would have been to provide the pager a capability of controlling transmission power level in order to increase accuracy and efficiency of a wireless thermostat system.

Referring to Claim 2, Carner et al. in view of Harel al. disclose the method of claim 1, Carner et al. disclose wherein said algorithm (18) is arranged to incrementally adjust the power output of the pager within a given power range (i.e. transmission range) (column 10 lines 7 to 23; column 10 lines 49 to 62).

Referring to Claim 6, Carner et al. in view of Harel al. disclose the method of claim 1, Carner et al. disclose that includes the further step of preventing the power output of the pager from being further incremented once it is determined that a message has been successfully transmitted (i.e. received a response signal) (column 12 line 39 to 54; see Figure 11).

Referring to Claim 9, Carner et al. in view of Harel al. disclose the method of claim 8, Harel et al. disclose of incrementally increasing the output power of the unit (110) within said range until such time as a message (i.e. standard inbound message) is successfully transmitted (i.e. received an acknowledge signal) to the network (105) (i.e. base station) (column 4 lines 32 to 44; see Figure 3); and programming the system controller (210) (i.e. power level controller) to transmit messages (i.e. standard inbound message) to the network (105) at the increment power

Art Unit: 2635

output setting (i.e. specified power level) at which a message was first successfully transmitted to the network (105) (column 4 lines 45 to 60).

Referring to Claim 11, Carner et al. in view of Harel al. disclose the method of claim 8, Carner et al. disclose wherein the message transmitted to the network (150) by the unit demands a response back from the network (150) (column 12 line 39 to 54; see Figures 11 and 13).

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carner et al. (US# 6,622,925) in view of Harel al. (US# 6,366,195) as applied to Claim 2, and in further view of Kim et al. (US# 5,710,981).

Referring to claim 3, Carner et al. in view of Harel al. disclose the method of claim 2, however, Carner et al. in view of Harel al. did not explicitly disclose wherein each increment some percentage of the power range.

In the same field of endeavor of two-way paging systems, Kim et al. teach that a portable radio power control device (10) increases some percentage of the power range (i.e. adjust power transmission with an adjustment scaling parameters) (column 6 line 63 to column 7 line 30; column 9 line 48 to column 10 line 50; see Figures 3 and 5) in order to reduce the interference level to other users of a portable radio power control device.

One of ordinary skilled in the art recognizes the need to adjust power transmission with a scaling power control level parameters to provide a satisfactory communication link taught by Kim et al. in a wireless thermostat system of Carner et al. in view of Harel et al. because Carner

Art Unit: 2635

et al. suggest it is desired to have a wireless thermostat system to have a control algorithm that correct varying communication performance depending on physical environment (column 10 line 49 to 62) and Kim et al. teach that a pager/subscriber unit has ability to adjust power transmission with an adjustment scaling parameter (column 6 line 63 to column 7 line 30) in order to determine power control signal depending on the location of the portable radio relative to the base station. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to adjust power transmission with a scaling power control level parameters to provide a satisfactory communication link taught by Kim et al. in a wireless thermostat system of Carner et al. with the motivation for doing so would have been to provide the a wireless thermostat system transmit with an efficient power transmission in order to avoid interference to other users caused when the wireless thermostat system transmit at unnecessarily high power transmission.

Referring to Claim 4, Carner et al. in view of Harel al. and in further view of Kim et al. disclose the method of claim 3, Kim et al. disclose wherein said power range is between 1 and 2 watts (column 10 line 25 to 50; see Figure 7).

Referring to Claim 5, Carner et al. in view of Harel al. and in further view of Kim et al. disclose the method of claim 4, Kim et al. disclose wherein the power is incrementally increased from the lowest power increment (i.e. 0.5 Watt) until such time as a message is successfully transmitted to the network (11) (i.e. a base station) (column 6 line 63 to column 7 line 30).

Claims 7 and 10 are objected to as being dependent upon a rejected base claim, but would

be allowable if rewritten in independent form including all of the limitations of the base claim

and any intervening claims.

Referring to claims 7 and 10, the following is a statement of reasons for the indication of

allowable subject matter: the prior art fail to suggest limitations that includes the further step of

locking the power setting at which a message is successfully transmitted in memory and

thereafter operating the pager at the store power setting.

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Martinez (US# 4,322,842) discloses a broadcast system for distribution automation and

remote metering.

Art Unit: 2635

Wilson et al. (US# 5,293,639) disclose a reduction of power consumption in a portable communication unit.

Moughanni et al. (US# 5,608,655) disclose a pager for wireless control and method therefor.

Lussenhop et al. (US# 6,131,021) disclose a method for extending the RSSI range and radio transceiver operating in accordance with this method.

Gelbien (US# 6,374,101) discloses a pager-based controller.

Howard et al. (US# 7,009,493) disclose an electronic device with paging for energy curtailment and code generation for manual verification of curtailment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V Nguyen whose telephone number is 571-272-3061. The examiner can normally be reached on Mon-Fri, 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 571-272-7308. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 2635

Page 9

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nam Nguyen April 17, 2006

WENDY R. GARBER
WENDY R. GARBER
SUPER JISORY PATENT EXAMINER
SUPER JISORY PATENT EXAMINER